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(A) A.C. power overload protection control.

(5) A protective control system for an electric line system supplying a load (L) comprises relay contacts (20a, 20b, 20c) for connecting 3 phase lines, wired to terminals (A2, B2, C2) to the load: rate sensing toroids (CRS1, CRS2, CRS3) wound around the terminal studs provide signals according to current rates of change and detector module (DM) integrates these to provide a signal according to the magnitude of current in the system, and then modifies this signal to simulate the thermal conditions of the power line system; the control signal thus formed is used, if it exceeds a threshold, to cause control module (CM) to trip the relay controlling contacts (20a, 206, 20c). The entire system is housed within a conventional side relay housing with electronic circuits (CM, DM) on opposite sides of the relay and with the toroids (CRS1, CRS2, CRS3) wound around the terminal studs, which are also of conventional size and spacing.

